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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/646,384	08/21/2003	Ricky W. Purcell	1443.049US1	9728
7590 01/18/2005 Schwegman, Lundberg, Woessner & Kluth, P.A. P.O. Box 2938 Minneapolis, MN 55402			EXAMINER GIBSON, ROY DEAN	
			ART UNIT 3739	PAPER NUMBER

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/646,384

Applicant(s)

PURCELL, RICKY W.

Examiner

Roy D. Gibson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 1-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/21/03 & 10/29/04
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4-6, 8-10, 12-13, 15-17, 20-23, 25-28 are rejected under 35

U.S.C. 102(b) as being anticipated by Ikeda et al. (4,925,743).

Ikeda et al. disclose a heat patch and its method of use comprising:

a reflective layer of a metal foil or a metallized film on a retaining means that inherently reflects IR energy emitted by the body (typically between 3 and 50 microns) back into the body; and

a heat source that produces heat by oxidation of a composition of a metal or metal oxide powders, etc. (exothermic reaction) initiated by the passing of air (oxygen) through a gas-permeable layer of the patch, resulting in generating heat in the range of 5-10 degrees C above body temperature (42-47°C): see col. 2, line 24-col. 3, line 39 and col. 4, lines 10-46.

Further to claims 23 and 28, Ikeda et al. disclose placing the heat patch on the skin with the reflective layer above the patch to reflect the IR radiation from the heat source back to the skin. However, the reflective is "near" the skin and thus, provides the broadly interpreted limitation of the claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2, 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al. in view of Augustine et al. (6,580,012). Ikeda et al. fails to disclose the heat patch further comprising a controller connected to said heat source to control the heat generated by said heat source wherein the heat is generated by passing a current through a resistive element. But, Augustine et al. discloses a wound treatment device with a resistive heater (Figure 10, # 51) positioned over a reflective layer (55) and connected to a temperature controller to maintain the temperature at a preset value (col. 4, line 25-col. 5, line 13 and col. 6, line 47-col. 7, line 4). Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the device of Ikeda et al., as taught by Augustine et al., to provide an alternative means of heating the patch and the patient during thermo-therapy.

Claims 7 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al. in view of Burkett et al. (5,918,590). Ikeda et al. fails to disclose the heat patch further comprising any combination of iron power, water, water-retaining agent, reaction promoter and salt. But, Buckett et al. disclose a heat cell for thermo-therapy

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with a composition comprising all of these elements (col. 1, lines 26-32, col. 2, lines 11-32, col. 2, line 62-col. 4, line 64). Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the device of Ikeda et al., as taught by Buckett et al., to provide an alternative equivalent composition as the chemical source for the heat patch to heat the patient's skin for thermo-therapy.

Claims 3 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al. The examiner maintains that it would have been an obvious matter of design choice to a person of ordinary skill in the art to provide a reflective layer in the form of aluminized polyester film because Applicant has not disclosed that such a film provides an advantage, is used for a particular purpose, or solves a stated problem.

Claims 24 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeda et al. in view of Zhang et al. (6,453,648). Ikeda et al. fails to disclose the reflective layer on the heat patch is attached or adhered to the patient's body. But, Zhang et al. disclose a heating device similar to the one disclosed by Ikeda et al., wherein the patch is adhered to the patient's skin during therapy (col. 8, lines 38-48). Therefore, at the time of the invention it would have been obvious to one of ordinary skill in the art to modify the device of Ikeda et al., as taught by Zhang et al., to adhere the patch and the associated reflective layer to the patient's skin.

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### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Davis et al. (6,336,935) disclose a disposable thermal body wrap with heat cells and a means to attached the wrap to the body of the patient; Fairlie (4,245,149) discloses heating system for chairs with an electrical resistive heater; Moore et al. (3,867,939) disclose a disposable applicator pad for thermo-therapy; and Helming (6,648,909) discloses a typical exothermal pack for thermo-therapy.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy D. Gibson whose telephone number is 571-272-4767. The examiner can normally be reached on M-F, 7:30 am-4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on 571-272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Roy D. Gibson

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Primary Examiner  
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January 7, 2005